ŠIAULIAI UNIVERSITY FACULTY OF HUMANITIES DEPARTMENT OF ENGLISH PHILOLOGY

SEMANTICS OF MENTAL VERBS IN ENGLISH BACHELOR THESIS

Research adviser: Doc. Dr. D. Roikienė Student: Aurika Šinušienė

Šiauliai, 2011

CONTENTS

INTRO	DDUCTION
I.	What is semantic syntax?
II.	Subjectivization
III.	Classification of English verbs9
IV.	Classification of English mental verbs11
4.1.	Process of perception11
4.1.	1. Cognitive verbs
4.1.2	2. Active verbs
4.1.3	3. Descriptive verbs
4.2.	Process of cognition
4.3.	Process of affectivity14
V.	Emotion verbs15
5.1.	Emotion verbs according to Beth Levin16
5.1.	1. Amuse verbs
5.1.2	2. Admire verbs
5.1.3	3. Marvel verbs
5.1.4	4. Appeal verbs
5.1.	5. Desire verbs
5.1.0	5. Judgment verbs
VI.	Mental verbs in Dreiser's novel Jennie Gerhardt
6.1.	Cognitive verbs
6.2.	Active verbs25
6.3.	Descriptive verbs
6.4.	Verbs of the process of cognition27
6.4.	1. Sative verbs
6.4.2	2. Dynamic verbs
6.5.	Amuse verbs
6.6.	Admire verbs
6.7.	Marvel verbs40
6.8.	Appeal verbs43
6.9.	Desire verbs43
6.10	. Judgment verbs
CONC	LUSIONS
REFE	RENCES
SOUR	CES

INTRODUCTION

In order to provide a good communication it is not enough to make a particular action or to know how to pronounce particular sounds which would have some kind of sense. It is also very important to think, to know what to say and how to say something. For that reason a person in a reflex action has to see, hear or sense something and in his/her mind make some cognitive actions, to think what to say. Moreover, while communicating not only words help to send the message for the listener but also a person has to show some emotions, some feelings which would help to reveal the meaning of the message. But there is a difference between the oral communication and the written text though the same emotion and the same information have to be given for both the listener and the reader. Thus the researches have shown an interest in analyzing the mental verbs of the English language. Some important investigations of mental process verbs have been made by Levin (1989), Morley (2000), Rogers (1971), Valeika (1998) and some others. Nevertheless, so far, there has been too little information available about the semantics of mental verbs. Thus the **subject** of this paper is the mental process verbs in the English language.

The **aim** of this paper is to analyze the semantics of English mental verbs and to explore the frequency of the usage of such verbs. It also should be said that while dividing mental (especially emotion) verbs into groups according to their meaning, this grouping is based on the subjective point of view.

To achieve the aim, the following **objectives** have been set:

- 1. to analyze the theory of the classification of the English mental process verbs,
- 2. to make the inventory of mental verbs,
- 3. to analyze the significance of the experiencer's position in a sentence,
- 4. to analyze the frequency of mental verbs used in Dreiser's novel Jennie Gerhardt

Materials and methods:

In order to write and achieve all objectives some **materials** were used. Firstly, some theory literature was used to introduce the reader with the difference between the general syntax and the semantic syntax. And also some theory was used to analyze the classification of English mental verbs. Then, one novel is chosen in order to analyze the frequency of mental verbs.

The following **methods** have been used to analyze the collected material:

 the descriptive method was used to reveal, classify and analyze the semantics of mental verbs of the English language,

- 2. the metaanalysis was used in order to interpret the results and conclusions made by other linguists
- 3. the statistical method was used to show the relative frequency of the usage of mental verbs in Dreiser's novel *Jennie Gerhardt*.

The **scope** of this research paper is 3312 examples which reveal the meanings of mental verbs and the position in a sentence of an expriencer.

The structure: This research paper consists of an introduction, theoretical part, practical part, conclusions, references, and sources.

Dissemination of the research: on the basis of the material of the present research a presentation was given at the scientific conference "Studentų darbai - 2011" Šiauliai university, Faculty of Humanities, 7th April, 2011.

We presume that our research and data collected for it might be useful for students conducting research in lexicology.

I. What is semantic syntax?

As we all know from our school times, syntax in linguistics is "is the study of the principles and rules for constructing <u>sentences</u> in <u>natural languages</u>"¹ i.e. syntax deals with the division of a sentence into the sentence parts e.g. *subject, predicate, object, attribute,* etc. E.g.:

1. John is eating his dinner.

In the example given above we may see that *John* is the *subject*, *is eating* is the *predicate*, and *dinner* is the object.

However, this general syntax and the division in such sentence parts could not express the difference between the two sentences below:

2. I don't believe his story.

3. *His story does not convince me* (Valeika, 1998:45).

Here the difference is based on the meaning of the sentence parts (Valeika, 1998:5) and the meaning of sentence parts depends on the type of the process. To make it clear, some terms here ought to be mentioned i.e. the *experiencer* and the *phenomenon. Experiencer* - is a human (or an animal or an inanimate entity) who (or which) is able to feel, see or think something i.e. the experiencer is the one who/which is a "perceiver or senser" (Valeika, 1998:40). *Phenomenon* – "that which is perceived or sensed" (Valeika, 1998:40). In both sentences given above the experiencer is *I*, and the phenomenon – *the story*. Nevertheless, in the two sentences above, they act as different syntactic parts of the sentence. In the first sentence, the experiencer is the subject and the phenomenon is the object, and in the second sentence these parts go vice versa.

Looking at these two sentences given above we may draw a conclusion that these two sentences have the same meaning i.e. their deep structure is the same, though their syntactic (surface) structure differs. So, the *semantic syntax* deals with the meaning of the sentence and its parts.

II. Subjectivization

As Valeika (1998) states, the phenomenon can be expressed in the ways given below: -a nominal word combination

¹ http://en.wikipedia.org/wiki/Syntax; accessed on 9 September, 2010

- a clause (infinitive or gerund)

- a noun/pronoun + a clause (infinitive) (Valeika 1998:46)

E.g.:

- 4. God loves all sinners. (a nominal word combination) (BNC)
- 5. This is just giving in to your Ego, which loves to play 'Ain't I awful!' (infinitve) (BNC)
- Everyone loves me for the very things that you want me to cover up! (apronoun + a clause) (BNC)

As it was mentioned above, the experiencer in the sentence may function as the *subject* or as the *object* thus, the same could be done with the phenomenon. "The rise of the phenomenon into the front position of the sentence is called the **subjectivization**". (Valeika, 1998:46) The examples of the subjectivization are given below:

- 7. John loves Jane.
- 8. Jane is loved by John.

The experiencer sentence 7 is *John* and it goes as the subject of the sentence, however, the experience *John* goes as the object in the sentence 8.

The subjectivization can also be achieved by using different mental verbs which carry the same semantic meaning. E.g.:

- 9. My children fear thunderstorms .vs. Thunderstorms frighten my children.
- 10. I like this solution to the problem. vs. This solution to the problem pleases me. (Levin&Hovav, 2005:14)

From the examples 9 and 10 (looking at the former sentences) we may see that the experiencer goes as the subject and the phenomenon goes as the object. And in the latter sentences of the examples 9 and 10 this is vice versa i.e. the phenomenon becomes the subject and the experiencer goes as the object of the sentence.

The verbs *fear* and *frighten*, *like* and *please* as given in the examples above, forms, as Levin ans Hovav (2005) say the minimal pairs. The usage of these minimal pairs in the sentences expresses the same semantic meaning of the verb but it changes the syntactical meaning of the two arguments – the experiencer and the phenomenon.

The process of subjectivization can be used in the sentences where the mental verb of any subclass appears. In other words, the process of subjectivization may be applied to the sentences which possess mental verbs denoting process of perception, process of cognition, and process of affectivity. E.g.:

- 11. *I saw the child crossing the street. Vs. The child was seen crossing the street.* (process of perception)
- 12. The police know him. Vs. He is known to the police. (process of cognition)
- 13. *Mary liked the gift. Vs. The gift appealed to Mary.* (process of affectivity) (Valeika 1998:42-46)

Experiencer as the	Experiencer as the	Examples
subject of the sentence	object of the sentnece	
forget	Escape	He forgot her name. \rightarrow Her
		name escaped him. (Valeika
		1998:45)
notice	Strike	She noticed the surprise in his
		eyes. \rightarrow The surprise in his
		eyes struck her. (BNC)
believe	convince	I don't believe, you see. \rightarrow You
		don't convince me. (BNC)
understand	puzzle	Toby didn't understand the
		question. \rightarrow Toby was puzzled
		by the question. (BNC)

The minimal pairs of the verbs of the process of cognition are the following:

Table 1. The minimal pairs of the verbs of the process of cognition.

The minimal pairs of the emotion verbs can be the following:

Experiencer	as the	Experiencer as the object	Examples
subject of the sentence		of the sentnece	
Admire; mar	vel at;	Beguile; captivate; charm;	Angel still admired his father's

delight in; groove on;	enchant; enrapture; enthral;	belief that money was not
0 0	excite; impress; wow	important. \rightarrow His father's
over		belief that money was not
		important impressed Angel
		(BNC).
Like; relish; enjoy	Please; appeal	Labour likes proportional
	r touse, appear	$\frac{representation.}{representation.} \rightarrow$
		Proportional representation
		pleases the labour (BNC).
Madden at; rage at;	Nauseate; nettle; peeve;	The very smell of you
maaaen ai, rage ai,	*	
	tantalize; tease, unnerve;	
	wex, grate on; jar on;	
	annoy; bug; discontent;	(<u>BNC</u>).
	disgruntle; enrage;	
4.1.1 1. 1.1	exasperate; irritate; madden	· · · · · · · · ·
Abhor; dislike;	Repel, sicken; anger;	And besides he repels me, so
execrate; hate, recent	disgust	clumsy and big with his cat
		eyes. \rightarrow And besides I dislike
		him, so clumsy and big with his
		cat eyes (BNC).
Dread; fear		The general fears of high oil
		prices. \rightarrow High <u>oil</u> prices
	perturb; scare; spook;	frighten the general (BNC).
	startle; terrify; terrorize;	
	intimidate, threaten; niggle	
	at	
Grieve for; grieve over;	Agitate; alarm; discompose;	My darling, three-quarters of
worry over; thrill to;	distress; disturb;; thrill;	me grieves for my dear old
distress; anguish over	touch; worry	Charles and Dim, just as much
		as you do. \rightarrow My darling, my
		dear old <u>Charles and Dim</u>
		distress the three quarters of
		me just as much as you do

Sicken of; tire of	Bother;	You're probably sick and tired
		of the word carbohydrate, but
		that's what should be on the
		menu for your evening meal.
		\rightarrow <i>The word carbohydrate</i>
		probably bothers <u>you</u> , but
		that's what should be on the
		menu for your evening meal
		<u>(BNC)</u> .
Sadden at; mope over	Afflict; dishearten; dismay;	\underline{I} am saddened at \underline{it} . $\rightarrow \underline{It}$
	sadden; upset	upsets <u>me (BNC)</u> .
Rejoice about; cheer	Amuse; cheer; delight;	He exulted in the communion
at; exult at; rejoice at;	elate; exhilarate; gladden;	of blood and water. \rightarrow The
exult in; exult over;	gratify; jollify; tickle	communion of blood and water
rejoice over		delighted <u>him (BNC)</u> .
Weary of;	Irk; plague; tire; try; weary	Are you weary of the endless
		round of new developments?
		\rightarrow Does the endless round of
		new developments plague <u>you</u> ?
		(BNC)

Table 2. The minimal pairs of emotion verbs

As it can be seen from the tables 1 and 2 given above there are some verbs which might be called near synonyms which have more or less the same semantic meaning but, however, the usage of such verbs changes sentences from the semantic syntax point of view.

III. Classification of English verbs

It is clearly known that there are many ways the English verbs may be divided and classified e.g. they may be divided into regular or irregular verbs; transitive or intransitive; auxiliary, etc. And now, in recent years, it is becoming increasingly difficult to ignore the other type of classification of English verbs.

According to Valeika and Buitkienė (2003) verbs may be grouped into several types of processes i.e.:

- processes of doing or material; e.g.:
 14. *The teacher writes on the board, and is neutral judge and scorer.* (BNC)
- of happening or occurrences; e.g.:
 - 15. *He died* in an accident while working on his boat in St Lucia in the West *Indies.*(BNC)
- verbal processes; e.g.:
 16. Colleagues think he is ideal for the new job, because of the ease with which he communicates with different people and his breadth of vision. (BNC)
- mental processes; e.g.:
 - 17. If someone says he loves God, but hates 'Boggers', he is a liar. (BNC)
- relational processes; e.g.:
 18. *The following entry relates to the research teams now in place.* (BNC)
- existential; e.g.:
 - 19. No record exists of his education and it is assumed that he was privately tutored. (BNC)

However, Morley (2000:95) states that there are only three main processes of verb i.e. *material*, *mental*, and *relational*. According to this linguist *mental* verbs are further subdivided into:

- process of perception (*see; hear*); e.g.:
 - 20. Thus when someone hears of the death of someone they are close to the reaction is, 'But it can't be true.' (BNC)
- process of cognition (think; know); e.g.:
 21. All she thinks about is being happy and that means having the things she thinks will make her happy.(BNC)
- process of affectivity (*like; fear*); e.g.:
 22. She likes making mincemeat of new writers. (BNC)

Morley (2000) provides the information that mental process verbs are not only emotion verbs but here also belong some verbs which have the meaning of thinking or the meaning of having or feeling some kind of sense.

Going deeper into analysis of our research we shall analyze these processes presented by Morley (2000:95). This analysis is given below.

IV. Classification of English mental verbs

4.1. Process of perception

Verbs that belong to this group express the process of sensing something. They are related to the five human senses: *sight, touch, taste, smell,* and *hearing* (Valeika 1998).

Verbs which express the process of perception are the following:

behold, dab, espy, examine, eye, feel, find, gawk, gaze, glare, glimpse, gloat, glower, gaze, handle, hear, hearken, introspect, invigilate, keek, leer, lip, listen, look, mishear, note down, nose, observe, ogle, outwatch, overhear, palpate, perceive, rehear, see, smell, snuff, sound, stare, supervise, taste, teleview, tig, tip, toe, touch, trace, travel, twig, watch, witness.²

Usually these verbs tend to be stative but sometimes they might express a dynamic situation. This may especially be shown by the verbs *listen* and *watch*, e.g.:

23. Are you listening to me?24. I'm just watching television. (Valeika 1998:41)

Rogers (1971: 206) in Helle (2006: 4) provides the information that the perception verbs may be further subdivided into the following three groups i.e. cognitive, active, and descriptive verbs.

4.1.1. Cognitive verbs.

These verbs seldom express a progressive action, and they do not express a motion towards completion. What is more, these verbs cannot express imperative case. Rogers (1971:206) in Helle (2006:4) states that "all cognitive verbs of perception mean the same thing, except for the fact that they represent perception of different kinds of sense-data". When the verbs of this subgroup appear in the sentence, the experiencer usually is given as the subject of the sentence. Cognitive verbs are the following:

Feel, hear, mishear, overhear, perceive, rehear, see, smell, sound, taste.³

Cognitive verbs may express all five senses. E.g.:

² Macmilan English Dictionary. 2002; Oxford Dictionary of English. 2005

³ Macmilan English Dictionary. 2002; Oxford Dictionary of English. 2005

- 25. Peter sees the birds.
- 26. Peter hears the birds.
- 27. Peter feels a stone in his shoe.
- 28. Peter smells smoke in his room
- 29. Peters tastes garlic in the food. (Helle 2006:4)

4.1.2. Active verbs.

These verbs are the opposite of the cognitive verbs. They may occur in the progressive action and they also may express the imperative case. The subject of the sentences with the active verbs is an *agent* (Helle 2006:5). It could be said that the subject of the sentence is the experiencer as in the sentences with the cognitive verbs but the difference appears in the semantic meaning of the verb. In order to illustrate this, two examples are given below:

- 30. Peter sees the birds. (Helle 2006:4)
- 31. Peter looks at the birds. (ibid, 5)

In the example 30 the verb 'sees' expresses the meaning that the experiencer 'Peter' sees the birds without any attempt. The experiencer does not make any effort in order to see the birds. While in the following example the verb '*looks at*' expresses the meaning that the experiencer does make a particular attempt in order to see the birds.

Having explained what active verbs as the subgroup of verbs of perception are, we may list them from the list of the verbs of process of perception given above (see p.11). These verbs are the following:

behold, dab, espy, examine, eye, feel, find, gawk, gaze, glare, glimpse, gloat, glower, gaze, handle, hearken, introspect, invigilate, keek, leer, lip, listen, look, note down, nose, observe, ogle, outwatch, palpate, see, smell, snuff, stare, supervise, teleview, taste, tig, tip, toe, touch, trace, travel, twig, watch, witness

Helle (2006:5) presents the examples of active verbs for all five senses. These are the following:

- 32. Peter looks at the birds.
- 33. Peter listens to the birds.
- 34. Peter feels the cloth
- 35. Peter smells the smoke in the room.
- 36. Peter tastes the food.

4.1.3. Descriptive verbs.

"Descriptive perception verbs <...> are verbal actions which are clearly the result of a state of using a certain sense" (Helle 2006:6). These verbs have an exclusive feature: according to Helle (2006) they do not occur with adverbs but they are followed by adjectives. However, there is only a small number of verbs which could be included in this subgroup. These verbs are: *look, sound, feel, smell, taste*. As it can be seen, the verbs of this subclass may also denote all the human senses. E.g.:

37. Peter looks happy.
38. Peter sounds happy.
39. The cloth felt soft.
40. Peter smells of smoke.
41. The food tastes good. (Helle 2006:6)

As it can be seen from the examples given above in some cases the usage of verbs of this subclass may allow the subjectivization. This is clearly seen in the examples 39 and 41. In these sentences the phenomenon is raised in the position of the subject of the sentence and thus the experiencer in these sentences ought to go to the position of an object but in these sentences it is omitted since it is clearly known for a reader who experiences a particular sense.

4.2. Process of cognition

According to Valeika (1998:43) the verbs which belong to this group express the process "of knowing in the broadest sense". Verbs which express the process of cognition have been taken according to their dictionary meanings and they are the following:

Apprehend, awake, bandy (about), believe, besot, bethink, blueprint, bottom, brood, calculate, catch (on), choose, chop, clench, cognize, compass, comprehend, compute, con, conceive, concentrate, conjecture, consider, contemplate, contrive, cotton (on), dabble, dawn, deem, deliberate, depicture, descant, design, devise, dig, digest, dream, envisage, evanesce, excogitate, fabricate, fib, find, follow, foresee, forget, gather (from), get, grasp, grip, guess, glimpse, gut, hall, have, hope, image, imagine, impeach, imply, import, incubate, interpret, invent, know, make, latch (on)light, mean, meditate, memorize, meseems/methinks, mind, misapprehend, miscomprehend, misconceive, mistake, misunderstand, mull, muse, opine, outsmart, penetrate, perceive, perpend, philosophize, pick (out), ponder, pretend, prophesy, read, realize, recite, recognize, recollect, relate, repose, retain, retrace, rumble, savvy, see, seize, speculate, suppose, suss, syllogise, take, think, translate, treat, twig, undeceive, understand, unlearn, unlive, unravel, visualize, wake, weary (for), ween, weigh, whiffle, will, whimple, wise, wit, wonder, work (out), worm, wrong.⁴

Nevertheless there is very little data about the verbs of the process of cognition, some classifications of these verbs still can be done. As it was stated above, verbs which belong to the mental process usually are the stative ones though some of them still may occur in a dynamic situation and they may contain a continuous structure. According to the examples found in British National Corpus, we may pick out the verbs which may occur in a dynamic situation from the list of verbs of cognition given above. These verbs create a situation where the experiencer makes a particular action i.e. the experiencer makes some effort and the action is not spontaneous. These verbs are the following:

bandy (about), brood, comprehend, con, conceive, concentrate, consider, contemplate, cram, dabble, deliberate, design, devise, dream, envisage, fabricate, fib, forget, hope, imagine, incubate, invent, meditate, memorize, mull (over), muse, ponder, pretend, prophesy, recollect, speculate, suss, think, visualize, will, wonder. E.g.:

- 42. And while Fabia was comprehending that here was a flirt of the first water, he was asking, 'But perhaps, despite your business card, you are on holiday in my country' (BNC).
- 43. *Mick was short of them and I was deliberating* whether to get them for him (BNC).
- 44. What he was **envisaging** may even be compared with a modern community centre with craft centres and other amenities (BNC).

4.3. Process of affectivity

Citing Valeika (1998) "processes of affectivity are realized by such verbs as *like, love, enjoy, please, delight, dislike, distress, hate, detest, want,* etc" i.e. all the emotion verbs fall under this category of processes. Thus it becomes clear that all the emotion verbs belong to this subgroup. So it is worth analyzing deeper the verbs which fall under the category of emotion verbs.

⁴ Macmilan English Dictionary. 2002; Oxford Dictionary of English. 2005

V. Emotion verbs

Emotion verbs are "a sub-class of the verbs of "propositional attitude" <...> Most of them fall under the category of "Psych-verbs" (verbs of psychological state)" (Athanasiadaou, Tabakowska, 1998:409).

It is quite difficult to talk about emotion verbs because various authors and linguists consider and put the same verb under the different categories. So in this part of the research we shall make the overview and the analysis on the ways how emotion verbs are divided by different linguists.

To begin with, Valeika and Buitkienė (2003) show (in their work) that verbs expressing a particular emotion may be found in the group of *stative* verbs and they are put into the subclass of *stative* verbs which is called *cognitive* verbs e.g. *like*, *love*, *hate* (Ibid). More examples of *stative* verbs showing cognition are in Table 4 presented below (verbs are divided into groups of positive, negative, and of both positive and negative meaning)⁵.

Positive meaning	Negative meaning	Both positive and negative meanings
Adore, desire, forgive, impress, like, love, please,	Abhor, detest, dislike, doubt,	Astonish, feel, etc.
satisfy, want, wish, etc.	hate, mind, etc.	

Table 4. Stative verbs

Another linguist Iwata (2008) gives the comparison of verb classifications of two linguists (Levin (1993) and Pinker (1989). Let us take a look and analyze the classification of verbs according to Pinker (1989). This linguist distinguishes the following classes of verbs:

- **pour-class** e.g. *dribble*, *drip*, *drizzle*, *dump*, *pour*, *shake*, *spill*, *etc.*;
- coil-class e.g. coil, spin, twirl, twist, wind, etc.;
- emit-class e.g. emit, excrete, expel, secrete, spew, vomit.;
- cover-class e.g. deluge, douse, flood, bandage, cover, face, pave, plate, etc.;
- stud-class e.g. bombard, blot, riddle, splotch, spot, stud, etc.;
- **saturate-class** e.g. *interlace*, *interleave*, *lard*, *ripple*, *vein*, *drench*, *infuse*, *saturate*, *etc.*;
- adorn-class e.g. adorn, burden, durty, emblazon, enrich, garnish, litter, ornament, etc.;

⁵ http://grammar.ccc.commnet.edu/grammar/progressive.htm accessed on December 12, 2009

The difference between the classification of verbs of the two linguists (Levin and Pinker) is that Levin (1989) distinguishes a class of emotion verbs. Levin's classification of emotion verbs is given below and according to that classification this research will be carried on.

5.1. Emotion verbs according to Beth Levin

This author (Levin) puts the emotion verbs into the category of "psych verbs". However, looking from the syntactic point of view, we may find the two major differences that the emotion verbs possess i.e. the experiencer may go in the sentence as the *subject* or as the *object*. According to the experiencer's syntactic position in the sentence, emotion verbs, as Levin (1989) presents, can be divided in the way as "the members of two classes [*admire verbs*; *amuse verbs*] are transitive verbs, and the members of other two classes [*marvel verbs*, *appeal verbs*] are intransitive verbs taking prepositional phrase complements" (Levin, 1989:189).

5.1.1. Amuse verbs

In her book Levin gives a great amount of verbs that belong to the class of *amuse* verbs. We shall divide the given verbs into verbs as follows:

- Verbs that have positive meaning;
- Verbs that have negative meaning;
- Verbs that have both positive and negative possible meanings according to the context where they occur.

Verbs that have **positive** meaning are as follows: *amuse, appease, assuage, awe, beguile, bewitch, calm, captivate, charm, cheer, comfort, console, content, delight, elate, embolden, enchant, encourage, engage, engross, enlighten, enliven, enrapture, entertain, enthrall, enthuse, entice, entrance, exhilarate, fascinate, flatter, galvanize, gladden, gratify, hearten, hypnotize, impress, inspire, interest, intrigue, invigorate, jollify, lull, mesmerize, mollify, move, pacify, placate, please, reassure, refresh, relax, relieve, revitalize, satisfy, sober, solace, sooth, spellbind, stimulate, strike, tickle, transport, uplift, wow.*⁶

Some examples are given below in order to show the usage of these words in the sentence.

⁶ Levin, B. 1989. English Verb Classes and Alternations. Preliminary Investigation. Chicago

45. This so delighted the King that he asked the University to make him a Doctor of Divinity, (BNC).

46. It's good to gladden the eye with a dish full of colour, (BNC).

Verbs that have **negative** meaning are these: *abash, afflict, affront, aggravate, agonize, alarm, alienate, anger, annoy, antagonize, appall, baffle, bewilder, boggle, bore, bother, bug, chagrin, concern, confuse, cow, crush, cut, daunt, deject, demolish, demoralize, depress, devastate, disappoint, disarm, discombobulate, discomfit, disconcert, discompose, discourage, disgrace, disgruntle, disgust, dishearten, disillusion, dismay, dispirit, displease, disquiet, dissatisfy, distract, distress, disturb, embarrass, enrage, exasperate, exhaust, floor, fluster, frighten, frustrate, gall, grieve, harass, haunt, horrify, humble, humiliate, hurt, incense, infuriate, insult, intimidate, irk, irritate, jar, jolt, madden, miff, mortify, muddle, mystify, nauseate, nettle, numb, obsess, offend, outrage, pain, peeve, perplex, perturb, pique, plague, preoccupy, provoke, puzzle, rankle, repel, repulse, revolt, rile, ruffle, sadden, scandalize, scare, shake, shame, shock, sicken, spook, stagger, startle, sting, stump, tantalize, tease, terrify, terrorize, threaten, tire, torment, trouble, try, unnerve, unsettle, upset, vex, weary, worry, wound.⁷*

Some examples are given below in order to show the usage of these words in the sentence.

47. Dinner would annoy Gina even more than tea, (BNC)48. But why were they so eager to discourage visitors? (BNC).

Verbs that have **both** positive and negative possible meanings are: *affect, agitate, amaze, arouse, astonish, astound, chill, confound, convince, daze, dazzle, dumbfound, electrify, excite, faze, flabbergast, intoxicate, overwhelm, stir, stun, stupefy, surprise, tempt, thrill, throw, titillate, and touch.*

Some examples of these verbs are presented above:

- 49. I suppose the main reason was that I was so **astonished** to find that they existed at all, (BNC).
- 50. When some rare Northern bird like the pine grosbeak is seen thus far south in the winter, he does not suggest poverty, but **dazzles** us with his beauty, (BNC).

⁷ Levin, B. 1989. English Verb Classes and Alternations. Preliminary Investigation. Chicago

51. "The idea excites me but it scares me too," she confesses, (BNC).

As it can be seen from the examples given above all the *amuse* verbs shift the experiencer to the position of an object of a sentence thus allowing for the subjectivization to appear.

5.1.2. Admire verbs

Admire verbs as it can be seen in Figure 1 (see p.19) are transitive verbs and as used in the sentence the experiencer takes the role of a subject. Levin grouped these verbs into two groups positive and negative (as we have done with the amuse verbs).

Verbs that have **positive** meaning: *admire, adore, appreciate, cherish, enjoy, esteem, exalt, fancy, favor, idolize, like, love, miss, prize, respect, relish, revere, savor, stand, support, tolerate, treasure, trust, value, venerate, worship* (Levin, 1989:191). E.g.:

- 52. She never pressed him and he appreciated that.
- 53. *He could think of nowhere he would rather be than at home, with people he knew and trusted, in a place without secrets.* (BNC)
- 54. "If anyone **loves** Me, he will keep My word; and My Father will **love** him, and We will come to him and make Our home with him.⁸
- 55. He who does not **love** Me does not keep My words; and the word which you hear is not Mine but the Father's who sent Me.". (Ibid)

As it can be seen, in this class we have some verbs that are most well known verbs which express emotion i.e. *like*, *love*, *enjoy* etc.

Verbs that have **negative** meaning: *abhor, deplore, despise, detest, disdain, dislike, distrust, dread, envy, execrate, fear, hate, lament, loathe, mourn, pity, regret, resent* (Levin, 1989:191). E.g.:

- 56. The Lord detests differing weights, and dishonest scales do not please him.⁹
- 57. *He* **hated** *them before the war and he* **hates** *them now with a depth you gentlemen here would find hard to understand*, (BNC)
- 58. She has youth, she has confidence, she **regrets** nothing. (BNC)

⁸ http://www.biblestudytools.com/csb/john/14-23.html accessed on April 25, 2010

⁹ http://niv.scripturetext.com/proverbs/20.htm accessed on April 25, 2010

The given examples confirm Levin's (1989) statement that the *admire* verbs form the situation where the experiencer of a sentence is given as the subject of a sentence.

5.1.3. Marvel verbs

According to Levin (1989) verbs which belong to the class of *marvel* verbs are intransitive and the experiencer takes a position of a subject of a sentence. Levin (1989) has classified these verbs according to the prepositions they take. But in this research we are going to classify them as the previous verbs have been classified i.e. according to their meaning.

Verbs that have **positive** meaning: *ache from, approve of, bask in, cheer at, delight in, enthuse at, enthuse over, exult at, exult in, exult over, feel for, gladden at, glory in, groove on, gush over, luxuriate in, marvel at, moon over, rave over, rejoice about, rejoice at, rejoice in, rejoice over, revel in, rhapsodize about, thrill to, wallow in.*¹⁰ E.g.:

- 59. Love does not insist on its own way; it is not irritable or resentful; it does not *rejoice at* wrong, but rejoices in the right (BNC).
- 60. They both *enthused over* my new look and I became weepy and wailed that I couldn't keep them (BNC).

Verbs that have **negative** meaning: *cry for, beware of, bleed for, bother about, care about, cringe at, despair of, disapprove of, fear for, fret about, fret over, fume at, grieve for, hurt from, madden at, mind about, moon about, mourn for, mourn over, obsess over, puzzle over, rage about, rage at, sadden at, sicken at, sicken of, sorrow over, suffer from, tire of, weary of, weep for, worry about, worry over.*¹¹ E.g.:

- 61. When your whole soul cried for a priest (BNC).
- 62. Indeed, I have made her immortal: my old friend Will Shakespeare wrote a play about a Danish prince called Hamlet who **moons about** the stage wondering whether he should kill his murderous mother (BNC).
- 63. *The poor centipede* **worried over** *the answer until he had a nervous breakdown and lost the ability to walk naturally* (BNC).

¹⁰ Levin, B. 1989. English Verb Classes and Alternations. Preliminary Investigation. Chicago

¹¹ Levin, B. 1989. English Verb Classes and Alternations. Preliminary Investigation. Chicago

Verbs that have **both positive and negative** possible meanings are: *care for, gloat over, react to, swoon at, thrill at, wonder at,* (Levin, 1989:192,193). E.g.:

- 64. *The picture forces the viewer to wonder at the subject of the crowd's attention,* (BNC).
- 65. *Pauline wrote 'I was thrilled at how quickly and easily the inches melted away,* (BNC).

The example of *marvel* verbs given above shows that verbs of this subgroup (as Levin (1989) stated) make the experiencer act as a subject of a sentence.

5.1.4. Appeal verbs

Appeal verbs as well as the *marvel* verbs are intransitive verbs but the experiencer of a particular emotion is expressed as the object. Moreover, Levin has grouped verbs of this class the same as *marvel* verbs – according to the preposition they take. But we put our interest in the meaning of the verbs.

Verbs that have **positive** meaning: *appeal to, matter to.*

Verbs that have **negative** meaning: *niggle at, grate on, jar on.* (Levin, 1989:192,193). E.g.:

- 66. *Kathie is all Nell has got, we've been told this several times; he appeals to Nell as the mother of their only child, not to cause her to leave home.* (positive meaning), (BNC).
- 67. *He had lost many of the people who mattered to him, and he was unsure of himself and his abilities.* (positive meaning), (BNC).
- 68. *The thin man niggled at him like a flea in the hide of a rhinoceros*. (negative meaning), (BNC).
- 69. We are not sure that Latimer's and Ridley's sermons would not **jar on** modern refinement quite as much... (negative meaning), (BNC).

Having discussed all four sub-classes of psych verbs into which the emotion verbs are divided according to Levin (1989) we shall have in mind that there are some more emotion

verbs which this linguist puts under two other classes i.e. verbs of desire (desire verbs) and judgment verb. Now we shall analyze them in a bit deeper way.

5.1.5. Desire verbs

The author has divided the verbs of this class into two groups – *want* verbs and *long* verbs. (Levin, 1989:194).

Want verbs: "covet, crave, desire, fancy, need, want".

Long verbs: ache for, crave for, dangle after, fall for, hanker after, hanker for, hope for, hunger for, itch for, long for, lust after, lust for, pine for, pray for, thirst after, thirst for, wish for, yearn after, yearn for. (Levin, 1989:194,195). E.g.:

- 70. To combine forces made supreme sense to him, and the more absurd the reality seemed, the more deeply he **desired** it. (want verb), (BNC).
- 71. *He's perfectly entitled to come here but not to run off with anything he fancies and sell it.* (want verb), (BNC).
- 72. Performers also crave for power. (long verb), (BNC).
- 73. Blessed are those who hunger and thirst for righteousness.¹² (long verb)

According to this division we can state that the *want* verbs are transitive and the *long* verbs are intransitive. What is more, the given example of the usage of *desire* verbs express the idea that the experiencer in these cases acts as the subject of the sentence.

5.1.6. Judgment verbs

According to Levin (1989), these verbs are divided into **positive** and **negative** according to their meaning. And also it can be said that they are all transitive verbs.

Verbs that have **positive** meaning: "acclaim, applaud, bless, celebrate, commend, compensate, compliment, congratulate, eulogize, excuse, extol, felicitate, forgive, greet, hail, honor, laud, pardon, praise, recompense, remunerate, repay, reward, salute, thank, toast, welcome." (Levin, 1989:195). E.g.:

74. I had also just complimented her on her dress, (BNC).

75. 'Jesus forgives you,' said someone over to my left, (BNC).

¹² http://bible.cc/matthew/5-6.htm accessed on April 28, 2010

76. "Pardon all my past transgressions, Give me strength for days to come; Guide and guard me with Thy blessing Till Thy angels bid me home." (Dickens)¹³

Verbs that have **negative** meaning: "abuse, backbite, calumniate, castigate, censure, chasten, chastise, chide, condemn, criticize, decry, defame, denigrate, denounce, deride, disparage, fault, fine, impeach, insult, lambaste, malign, mock, revile, ridicule, scold, scorn, shame, snub, upbraid, victimize, vilify. (Levin, 1989:195). E.g.:

- 77. But Moscow has consistently **disparaged** any initiatives for the formal neutralisation of the country, (BNC).
- 78. In 1900 a dispute arose because it was said that the Taff Vale Railway Company had victimized a trade unionist who led a wage demand, (BNC).
- 79. The horror of bachelorhood which **condemns** you to arid thought for ever, and the horror of marriage, which **condemns** you to lies and hypocrisy for ever. (BNC)

Having analyzed this, a figure which shows the whole classification of the mental verbs is made and presented in the next page.

¹³ http://www.poetry-online.org/dickens_charles_a_childs_hymn.htm; access time: October 25,2010



Figure 1: classification of mental process verbs

VI. Mental verbs in Dreiser's novel Jennie Gerhardt

In order to analyze the frequency of the usage of mental verbs it was worth reviewing at least one novel written in the English language. For this investigation one of the Dreiser's novels titled "Jennie Gerhardt" was chosen. The mental verbs used in this novel were analyzed in the way they were classified above including the frequency of the occurrences of the subjectivization. In order to make this investigation the statistical method was used to show the relative frequency of the usage of mental verbs in Dreiser's novel *Jennie Gerhardt*.

Moreover, a special computer program "CONCORD" was used. The selected verbs were calculated and divided into the subgroups of mental verbs as they were given previously. And having calculated the frequency of these mental verbs some figures were drawn and provided together with the description. Having done this, it was found out how many mental verbs the author used, of what type they were, and whether they were simpler, casual verbs or more exaggerate mental verbs were used. As it was mentioned above the process of perception of the mental verbs had three subgroups i.e. cognitive, active, and descriptive verbs. The frequency of the verbs used in the novel from these three subgroups was given below.



6.1. Cognitive verbs

Figure 2. Frequency of cognitive verbs.

Collected data about the frequency of cognitive verbs (which is the subclass of verbs of perception) used in the novel was presented in Figure 2. As it could be seen, not all the verbs of this subgroup were used. Verbs which were not used were the following: *feel, mishear, perceive, rehear, smell,* and *taste.* Figure 2 also provided the information that the verb *see* possessed the leading position according to the frequency. It was used even for 182 times. Although it has been mentioned that cognitive verbs as the subgroup of verbs of perception usually form the deep structure of a sentence in the way that the experiencer acts as the subject of a sentence, in the novel the case of subjectivization appeared and thus the experiencer was shifted to the position of an object in 9 sentences of a novel. E.g.:

- 80. Jennie was seen wearing the gold watch.
- 81. At times he was **seen** driving with her by people who knew him in a social and commercial way.
- 82. Only he had been seen in other cities, in times past, with this same woman.

As it could be seen from Figure 2 the verb *hear* was used in the novel even for almost three times less than the verb *see*. The verb *hear* was used 73 times. The other two verbs of

this subgroup used in the novel were the verb *overhear* and the verb *sound*. The verb *overhear* was used for 2 times; the verb *sound* was used for 9 times.



6.2. Active verbs

Figure 3. Frequency of active verbs

In Figure 3 the frequency of active verbs which were in the subgroup of verbs of perception was presented. Comparing with the number of different words which belonged to this group and which were presented above in the theoretical part it could be clearly seen that the author used only a small number of verbs of this group in his novel. The other verbs as *behold, dab, espy, gawk, glare, glimpse, handle, invigilate, keek, etc.* were not used. Figure 3 also provided the information that the leading verb of this group was the verb *look* which was used even for 132 times. The least used verb (not taking the verbs which were not used) was the verb *eye.* It was used just once. The example sentences taken from the novel and containing the verbs from figure 3 were presented below.

- 83. *Lester eyed him without a change of expression.*
- 84. *Gerhardt listened*, and the meaning in his voice interpreted itself plainly enough.
- 85. *"The clerk looked at her, and again recognized that absolute want was written all over her anxious face.*
- 86. *He touched* the little bell at its throat, while Jennie stood there, unable to speak.

The small number of sentences contained the verbs presented in Figure 3, however, the experiencer in some of these sentences became the object. The frequency of such cases was marked in red colour in Figure 3. The examples of such sentences were presented below.

- 87. *Kane,*" *she would say to Jennie when she found her watching helplessly at the bedside or wandering to and fro, wondering what to do.*
- 88. It **touched** the heart of the innocent working-girl with hope, for hers were the years, and poverty could not as yet fill her young mind with cares.
- 89. A girl who carries washing must expect criticism if anything not befitting her station is **observed** in her apparel.
- 90. Religion was not a thing of mere words or of interesting ideas to be **listened** to on Sunday, but a strong, vital expression of the Divine Will handed down from a time when men were in personal contact with God.



6.3. Descriptive verbs

Figure 4. Frequency of descriptive verbs

Figure 4 presented above showed the frequency of the subgroup of verbs of process of perception – the descriptive verbs. Nevertheless, this subgroup possessed a quite small number of verbs; verbs of this subgroup had the average usage. The most frequently used verb of this subgroup was the verb *feel*. The author used particularly this verb for 63 times. Two verbs of this subgroup were not used at all in the novel i.e. the verbs *smell* and *taste*. The verb *hear* was used only one time and the verb *listen* in this case was used two times. According to the examples gathered, it could be said that the experiencer in sentences which contained this kind of verbs went only as the subject. The example sentences which contain the verbs presented in Figure 4 were given below.

91. She looked so weak and helpless that Jennie could hardly contain herself.

- 92. Far off the notes were **sounding** gently, and nature, now that she listened, seemed to have paused also.
- 93. Jennie *felt* sorry to think that her father might die, but she was pleased to think that if he must it was going to be under such comfortable circumstances.
- 94. "Since I had the fever I don't hear good.

6.4. Verbs of the process of cognition

As it was mentioned in the theoretical part, verbs of the process of cognition could be stative and dynamic. So the frequency of the occurrences of such verbs was also presented in such a way i.e. stative verbs of the process of cognition were separated from the dynamic verbs of the process of cognition.



6.4.1. Sative verbs

Figure 5. Frequency of stative verbs

Figure 5 presented above was organized a bit differently since there were too many verbs in this subgroup to show them all. Nevertheless, it provided some productive information as well. Firstly, Figure 5 did not contain verbs of this subgroup which were not mentioned in the novel. The total number of the not used stative verbs was 64. This number includes the verbs such as: *apprehend, awake, besot, bethink, blueprint, calculate, chop, clench, cognize, compass, compute, conjecture, contrive, depicture, evanesce, excogitate,*

image, impeach, etc. As it could be seen from Figure 5, there were five verbs used once in the novel in the sentences where the experiencer was a subject. These verbs were the following: descant, interpret, relate, wit, and wrong. There were also five verbs which were used once but the experiencer in the sentences marked the object. These verbs were: dawn, deem, perceive, suppose, and guess. In the novel the author used three verbs for two times and three verbs for three times in the sentences where experiencer was the subject of a sentence. These verbs were such as: foresee, seize, and work out (used for two times); get, retain, and grasp (used for three times). Figure 5 showed that two verbs were used for four, five and for six times where the experiencer was the subject of a sentence. These are the following: choose and *take* – four times; *mind* and *weigh* – five times; *deem* and *have* – six times. Even nine verbs of this subgroup were used by the author in the novel for more than 10 times but less than 100 times in the sentences where the experiencer was also a subject. These verbs are the following: believe - 51 time, make - 24 times, mean - 29 times, suppose - 25 times, guess -18 times, see – 59 times, find – 22 times, treat – 10 times, understand – 60 times. Finally, only one verb of this subgroup was used for more than 100 times in the sentences where the experiencer expressed a subject of a sentence. This verb was know and it was used even for 457 times.

There were some verbs used in the novel in the sentences where the experiencer expressed the object of a sentence. These verbs were the following: *see* used three times; *understand* – used for four times; verbs *weigh* and *know* used for five times.

The example sentences taken from the novel which contained the verbs mentioned above were presented below. E.g.:

The experiencer acted as the subject of a sentence:

- 95. *He believed* there was a hell, and that people who sinned would go there.
- 96. *He knew* that the issue of taking her, even as his wife, was made difficult by the senseless opposition of her father.
- 97. *He had been meditating whether anything more could be done for Jennie, but he could not make up his mind about it.*
- 98. *"Jennie did not quite grasp what he was talking about, but she knew it meant that he was not entirely satisfied with himself and was sorry for her.*
- 99. Stover, for she had **deemed** it best to abandon the name of Kane.

The expriencer acted as the object of a sentence:

- 100. *His place in the world was better than hers, yet it dawned on him after a time that there might have been something in her point of view.*
- 101. Just let me know, and I'll help you.
- 102. *He felt exceedingly young as he talked to this girl, and he often wondered whether it were not possible for her to perceive and appreciate him on his youthful side.*
- 103. Jennie hesitated about communicating with Lester, who was **supposed** to be in New York; the papers had said that he intended to spend the winter there.
- 104. "Let me see," he repeated, opening and closing drawer after drawer of the massive black-walnut bureau.
- 105. I could make her understand.
- 106. That which worried Jennie most, and there were many things which **weighed** upon her sensitive soul, was the outcome of her own life— not so much for herself as for her baby and the family.



6.4.2. Dynamic verbs

Figure 6. Frequency of dynamic verbs.

Figure 6 provided the information of the dynamic verbs of the process of cognition. Firstly, it was worth mentioning that there were 20 verbs of this subgroup which were not used in the novel. These verbs were as following: *bandy (about), comprehend, concentrate, cram, dabble, design, devise, envisage, fabricate, fib, incubate, invent, etc.* Looking at Figure 6 given above, it could be seen that there was one verb which was used four times, one verb used five times, one verb used eight times and one verb which was used for more than 100 times in the sentences where the experiencer was the subject of a sentence. These verbs were the following: *meditate* – 4 times; *dream* – 5 times; *imagine* – 8 times; and *think* – used 439 times. While analyzing the frequency of the dynamic verbs of the process of cognition it became clear that there were two verbs which were used only one time, two verbs which were used three times and also two verbs used six times in the sentences where the experiencer took the position of a subject of a sentence. These verbs were such as: *conceive* and *deliberate* – used once; *ponder* and *speculate* – used three times; *contemplate* and *pretend* – used six times. Moreover, Figure 6 provided the information that there were 6 verbs of this group which were used by the author in the novel for more than 10 times but less than 100 times in the sentences where the experiencer was a subject of a sentence. These verbs were the following: *brood* – 15 times; *consider* – 21 times; *forget* – 17 times; *hope* – 41 time; *will* – 21 time; *wonder* – 35 times.

Talking about the sentences where the experiencer denoted the object of a sentence, Figure 6 showed that there was one verb used five times in such sentences. This verb was *think*. It could be also seen that there were two verbs used in such sentences only once. These verbs were *dream* and *hope*.

Example sentences with the verbs mentioned above were given below. E.g.:

The experiencer was expressed as the subject of a sentence:

- 107. Lester was brooding over the history of Egypt, its successive tides or waves of rather weak-bodied people; the thin, narrow strip of soil along either side of the Nile, <...>
- 108. *He could not help considering it from the standpoint of a grandparent, particularly since it was a human being possessed of a soul.*
- 109. He **pondered** over the situation, and hearing that a manufacturing boom was on in Cleveland, he thought it might be wise to try his luck there.
- 110. He had been **wondering** where Letty was and how near her actual arrival might be when he was seized with a tremendous paroxysm of pain.

The experiencer was expressed as the object of a sentence:

111. Despite his Lutheran upbringing, the practice of medicine in a large and kindly way had led him to the conclusion that there are more things in heaven and earth than are **dreamed** of in our philosophies and in our small neighbourhood relationships.

- 112. *"Let us hope she proves worthy of all that has been done today.*
- 113. "The leaves coming down make me think I am never going to get well.
- 114. It set him thinking.

6.5. Amuse verbs

As we mentioned previously, *amuse* verbs were divided into three subgroups: **positive**, **negative**, and the ones which had **both positive** and **negative** meaning according to the context. First of all, we should analyze the frequency of the usage of *amuse* verbs which had the **positive** meaning.



Figure 7. Frequency of positive amuse verbs

In the bar chart given above the frequency of *amuse* verbs which had positive meaning was shown. First of all, as it was mentioned previously, all the amuse verbs allowed the possibility for the subjectivization to appear. That was why there are no sentences which possessed the verbs of this subgroup where the experiencer would act as the subject of a sentence. Moreover, as it could be clearly seen the majority of verbs were not used in the novel by the author. This group included: *appease, assuage, beguile, bewitch, calm, captivate, content, elate, enchant, engross, enliven, enthrall, enthuse, entice, exhilarate, galvanize, gladden, hypnotize, intrigue, invigorate, jollify, lull, mesmerize, mollify, pacify, placate, reassure, refresh, revitalize, sober, solace, spellbind, stimulate, tickle, uplift, wow. However, it could be mentioned that some of these words though were not used as the verbs, still some of them were used as other parts of speech e.g. the author did not use the verb to <i>calm* but he used the adjective *calm* for nine times. Another example could be given with the verb to

sober. Though this verb was not used in the novel but the author used this word once as an adjective, a noun, and an adverb.

Looking at the bar chart given above it could be seen that eight verbs were used for one time in the novel. These verbs were the following: *charm, embolden, enlighten, enrapture, entrance, gratify, hearten, sooth.* E.g.:

- 115. Gerhardt had not thought this would be left to her, but need emboldened her.
- 116. The one polished, sympathetic, philosophic—schooled in all the niceties of polite society, and with the means to **gratify** her every wish; the other natural, sympathetic, emotional with no schooling in the ways of polite society, but with a feeling for the beauty of life and the lovely things in human relationship which made her beyond any question an exceptional woman.
- 117. Whenever his conscience pricked him too keenly he would endeavour to hearten himself with his pet phrase, "All in a lifetime.

What was more, talking about the verb *charm*, it could be said that the author used this verb only once, though this word was used twice as the noun and even twenty five times it was used as the adjective *charming*.

Analyzing Figure 7 further, it could be seen that eleven verbs were used for two times in the novel. These verbs are: *amuse, awe, cheer, comfort, encourage, flatter, impress, inspire, relax, satisfy, transport.* E.g.:

- 118. Nagged to desperation by his thoughts, Brander first talked to her to **amuse** himself; but soon his distress imperceptibly took flight; he found himself actually smiling.
- 119. Finally, he **flattered** himself that he had a grasp upon a right method of living, a method which was nothing more than a quiet acceptance of social conditions as they were, tempered by a little personal judgment as to the right and wrong of individual conduct.
- 120. The thought comforted her; she fed upon it in her hours of secret loneliness.

Looking further, there were three verbs which were used for three times (*console*, *entertain*, *fascinate*), one verb used for four times (*relieve*), one verb was used for six times (*strike*), three verbs used for seven times (*delight*, *engage*, *move*) and there were two verbs

which were used by the author in the novel even for more than ten times i.e. the verb *interest* used for twelve times and the verb *please* was used even for eighteen times. E.g.:

- 121. "I'll have to do it shortly," she thought, and **consoled** herself with the idea that she would surely find courage before long.
- 122. Several times the physician administered cocaine with a needle in order to **relieve** him of useless pain.
- 123. Now they would have another club with which to strike him and her.
- 124. Olsen, always taking with her toys, candy, or whatever came into her mind as being likely to **interest** and please the child.
- 125. Her delight touched and pleased him immensely.

Having Figure 7 i.e. the *amuse* verbs of **positive** meaning used in the Dreiser's novel discussed, further the *amuse* verbs having **negative** meaning would be reviewed. The bar chart showing the frequency of the *amuse* verbs having **negative** meaning and which were used in the novel was given below. Here also all the verbs of this subgroup used allowed the process of subjectivization.



Figure 8. Frequency of negative amuse verbs

As it could be seen from the bar chart presented above, the great majority of *amuse* verbs with **negative** meaning were not used in the novel by the author. The not used verbs were the following: *abash, aggravate, agonize, alarm, alienate, appall, bewilder, bug, chagrin, cow, daunt, demolish, demoralize, disarm, dispirit, enrage, harass, infuriate, irk, madden, nauseate, peeve, plague, provoke, sting, terrify, unsettle, wex, etc. However,*

similarly to the *amuse* verbs which had **positive** meaning there were some words which were made by using the same root of the word but they were used in different parts of speech e.g. the word *floor* was not used by the author as the verb but it was used in the novel as the noun even for 33 times.

What was more, there were more *amuse* verbs of **negative** meaning used once in the novel than there were *amuse* verbs of **positive** meaning used also once. These verbs were the following: *annoy, concern, confuse, crush, discompose, discourage, disgust, dishearten, dismay, displease, distract, distress, embarrass, exhaust, horrify, insult, numb, outrage, pain, <i>puzzle, shake, shame, sicken, stagger, wound.* E.g.:

- 126. *His action discomposed her.*
- 127. Above all, she was dismayed to think of its effect upon Lester.
- 128. *His generosity shamed them for the moment; they even tentatively invited him to come and live with them, but this he would not do.*
- 129. Sebastian came, but it was with a blow which staggered his adversary.

The bar chart presented above provided the information that there were five verbs repeated in the novel by the author for two times and there were six verbs used in the novel for three times. The verbs used for two times were these: *afflict, bore, depress, disgrace, and shock.* E.g.:

- 130. For the first time in her life, aside from the family attitude, which had **afflicted** her greatly, she realized what the world thought of her.
- 131. I'm sure I've bored you enough already as it is.
- 132. **Disgrace** your parents, break your mother's heart, injure the business, become a public scandal, and then marry the cause of it?

The verbs used in the novel for three times were the following: *bother, disappoint, haunt, offend, upset, weary.* E.g.:

- 133. There were other questions that **bothered** him—such questions as the belief in a single deity or ruler of the universe, and whether a republican, monarchial, or aristocratic form of government were best.
- 134. She began to feel unaccountable sinkings of spirit, nameless and formless fears seemed to surround and **haunt** her.

Analyzing Figure 8 further, it could be seen that there were three verbs used in the novel for four times (*cut, frighten, tease*), one verb used for five times (*disturb*), and one verb used in the novel by the author for eight times (*grieve*). E.g.:

- 135. "I'm democratic and you're not," he **teased**; but he approved thoroughly of everything she did.
- 136. One thing that **disturbed** him, however, was the occasional thought, which he could not repress, that he was not doing right.
- 137. It grieved the old man that Vesta should not be allowed to go to a German Lutheran parochial school, but Lester would listen to nothing of the sort.

Comparing Figure 7 and Figure 8 it could be seen that there were two times more emotion *amuse* verbs of **negative** meaning which were repeated in the novel for more than ten times. These verbs were as the following ones: *hurt* (repeated eleven times), *irritate* (used for eleven times), *trouble* (used for eleven times) and the verb *worry* which was used in the novel even for 48 times. E.g.:

- 138. *Gerhardt, who had begged him not to ignore Jennie entirely, trembled for fear he would say or do something which would hurt her feelings.*
- 139. It **irritated** him greatly, for he suspected at once that it was a scheme to blackmail him.
- 140. *The utterance of the falsehood troubled her.*
- 141. That which **worried** Jennie most, and there were many things which weighed upon her sensitive soul, was the outcome of her own life.

Having discussed the *amuse* verbs of **positive** and **negative** meanings, the further investigation would be made while analyzing the frequency of the usage of the third subgroup of *amuse* verbs i.e. the verbs which had **both positive and negative** meaning. Here also in all the sentences which contained verbs of this subgroup the experiencer acted as the object of a sentence.



Figure 9. Frequency of amuse verbs with positive and negative meaning

The bar chart given above provided the information about the frequency of the usage of the *amuse* verbs which had **both positive and negative** meanings according to the context. As it could be seen, here the majority of verbs also were not used by the author (the same as with the verbs of other two subgroups of *amuse* verbs). The author did not use the verbs of this subgroup such as: *agitate, electrify, faze, flabbergast, intoxicate, stupefy, tempt, throw, titillate, etc.* Talking about the verb *throw* it was true that while reading one might find this verb and not only once. But, however, this verb was used with the other meaning and it belonged to the group of *motion* verbs due to the fact that in this novel when the verb *throw* was used it had the meaning of "to use your hand to an object send through the air" (Macmilan English Dictionary. 1499:2002)

Investigating the bar chart presented in Figure 9 further, it could be seen that there were three verbs used in the novel only once. These verbs were as following: *amaze*, *daze*, *and stun*. E.g.:

- 142. Jennie was overawed and **amazed**, but no show of form colorful, impression imperial, could take away the sting of death, the sense of infinite loss. (the verb in this context has the negative meaning)
- 143. *She was dazed, almost to the point of insensibility.* (in this case the verb is used in negative meaning)
- 144. She was horrified, stunned, like a bird in the grasp of a cat; but through it all something tremendously vital and insistent was speaking to her. (in this case the verb also has the negative meaning).
The bar chart presented above provided the information that in the novel there were two verbs of this subgroup used twice (*excite* and *thrill*), four verbs used for three times (*convince*, *overwhelm*, *stir*, and *surprise*), and two verbs used for four times (*arouse* and *astonish*). E.g.:

- 145. *The great man was thrilled as he looked at her pretty innocence.* (in this case this verb has the positive meaning)
- 146. Bass was no sooner in Cleveland than the marvel of that growing city was sufficient to completely restore his equanimity of soul and to stir up new illusions as to the possibility of rehabilitation for himself and his family. (according to the context here this verb has the positive meaning)
- 147. Vesta was astonished to see her stepfather, usually so courteous, in so grim a mood. (here the verb has the negative meaning).

Talking about the verbs used in the novel for more than ten times, there were only two of this subgroup. These were the following: *affect* and *touch*. The verb *affect* was used for 13 times in the novel, and the verb *touch* was used almost the same for the 16 times. What was more, it was worth saying that the word *touch* was used in the novel as the noun for several times as well. Some examples of the two verbs repeated for more than ten times were given below. Cf.:

- 148. *The fact that Gerhardt was dead made no particular difference to Lester, except as it affected Jennie.* (the verb in this context has the negative meaning)
- 149. *Together they presented so appealing a picture of honest necessity that even the clerk was affected.* (here the same verb has the positive meaning)
- 150. That wonderful radiance which fills the western sky at evening **touched** and unburdened her heart. (here the verb has the positive meaning)
- 151. *He was by no means a hard man, and the thought touched him.* (in this case the verb has the negative meaning)

6.6. Admire verbs

As it was known the *admire* verbs fell into only two subgroups i.e. the ones which had **positive** meaning and the ones which had **negative** meaning. What was more, as it was



mentioned before, Levin (1989) stated that *admire* verbs left the experiencer in a subject position of a sentence.

Figure 10. Frequency of positive admire verbs

The pie chart presented above provided the information about the frequency of *admire* verbs of **positive** meaning which were used in the novel. As it could be clearly seen the most often used verb according to the multitude was the verb *like*. It was repeated in the novel even for 130 times. Another often used verb of this subgroup was *love*. This verb was repeated for 62 times. E.g.:

- 152. But she loved her children and her husband, and was naively proud of their position and attainments.
- 153. *He liked* this homey home atmosphere—his mother and father and his sisters—the old family friends.

However, only these two verbs were used so often in the novel. Other verbs which belonged to this subgroup were used much more seldom. E.g. the verbs such as *cherish*, *support* or *value* were used only once, the verbs such as *adore* or *miss* were used just twice. The examples of these verbs were given below.

- 154. The earthly ambitions he had once cherished were gone for ever.
- 155. I value his friendship very highly, and I am sincerely sorry.

156. *Gerhardt adored the child, and she could do anything with him; he was always her devoted servitor.*

What was more, there were some verbs of this subgroup which were not included in the pie chart due to the fact that they were not used by the author in the novel at all. There were twelve of them. Comparing with verbs which were not used of the class of *amuse* verbs, the notice could be made that the author did not use less *admire* verbs than the *amuse* verbs. The *admire* verbs which were not used at all were the following: *esteem, exalt, favor, idolize, prize, relish, revere, savor, tolerate, treasure, venerate, worship.*

The pie chart showing the frequency of the usage of the *admire* verbs which had **negative** meaning was presented below.



Figure 11. Frequency of negative admire verbs

As it could be seen from the pie chart presented above, there were not many verbs of this subgroup. Moreover, not all of them were used in the novel. There were even ten not used verbs. These were the following: *abhor, deplore, detest, disdain, dread, envy, execrate, loathe,* and *mourn.* However, some of words such as *dread* or *envy* were used in the novel as the nouns. E.g.:

- 157. There she stood by the front window and looked at it again, a sickening sensation of *dread* holding her as though in a trance.
- 158. *He realized the danger of envy, and preferred a Spartan form of existence, putting all the emphasis on inconspicuous but very ready and very hard cash.*

The pie chart given in Figure 11 provided the information that the most often repeated verb of this subgroup was the verb *hate*. Another frequently used verb of this subgroup was the verb *fear*. Meanwhile other verbs presented in Figure 11 were used only for one or two times. Some examples of these verbs from the novel were given below.

- 159. He hated to think of the snow-covered Christmas morning and no table richly piled with what their young hearts would most desire.
- 160. When she came to his familiar door she paused; she **feared** that she might not find him in his room; she trembled again to think that he might be there.
- 161. They **resented** the way in which he took charge of the expenditures after Martha *left*.

6.7. Marvel verbs

Though, according to Levin (1989), there was a number of emotion verbs which fell into the class of *marvel* verbs, but having reviewed the novel "Jennie Gerhardt" it became clear that the author of this novel (Theodore Dreiser) was not prone to use such verbs in his novel. But nevertheless, he managed to use some of them.



Figure 12. Frequency of positive marvel verbs

The pie chart given above showed the frequency of the *marvel* verbs used in the novel, which had **positive** meaning. There were only two verbs which were used in the novel. The

verb *approve of* was used most often comparing with the other verbs of this subgroup. The second and the last verb of this subgroup according to the frequency of the usage was the verb *feel for*. A number of examples of the used verbs was given below.

162. She **felt** for the time being as if, for all that she had lived with him so long, she did not understand him, and yet, in spite of this feeling, she knew also that she did.

163. *The watch had been both approved of and admired by her.*

However, a much greater number of *marvel* verbs having **positive** meaning were not used in the novel at all. There were 25 verbs of this subgroup which were not used at all. These were as following: *ache from, cheer at, enthuse at, enthuse over, exult in, exult over, gladden at, groove on, luxuriate in, rejoice about, rejoice over, revel in, rhapsodize about, thrill to, wallow in, etc.*

Talking about the *marvel* verbs which had **negative** meaning, it could be said that similarly to the *marvel* verbs having **positive** meaning, the majority of these verbs were not used in the novel. There were 26 verbs of this subgroup which of them the author did not use in this novel. These were as following: *cry for, beware of, cringe at, disapprove of, hurt from, madden at, mind about, moon about, mourn for, mourn over, rage at, sadden at, sicken at, sicken of, tire of, weep for, etc.*

However, there was a small number of verbs of this subgroup and which were used by the author in his novel. These verbs were presented in the pie chart given below.



Figure 13. Frequency of negative marvel verbs

As it could be seen the majority of the used verbs were used only once or twice, and only one verb was used for 14 times in the novel. The examples of the usage of these verbs were given below.

- 164. Why should you worry about what your neighbours think.
- 165. "Don't worry over me, Lester," she consoled.
- 166. At times he **wearied of** everything and everybody save Jennie; he wanted to be alone with her.
- 167. Don't bother about me.

The third subgroup of the *marvel* verbs was the verbs which had **both positive and negative** meaning. Even though there were very few of them, in the novel the author used only two of them. The others were not used. These were the following: *gloat over, react to, swoon at,* and *thrill at.* The pie chart given below showed those two verbs which were used in the novel.



Figure 14. Frequency of marvel verbs with positive and negative meaning

As it could be seen from Figure 14, these two verbs had the totally different frequency of the repetition. While the verb *wonder at* was used only twice, the verb *care for* was used even for 25 times. E.g.:

168. *Well, I care nothing for your people.* (according to the context the verb has the negative meaning)

- 169. *I never cared for* any other woman but you before and—I'll be frank—I didn't know whether I wanted to marry you. (the verb has the positive meaning)
- 170. Where the sunlight was warm and the shadows flecked with its splendid radiance she delighted to **wonder** at the pattern of it, to walk where it was most golden, and follow with instinctive appreciation the holy corridors of the trees. (the verb has the positive meaning according to the context)

As it could be seen from the examples given above to **marvel** verbs, the experiencer in the sentences acted as the subject of the sentences. These examples only confirmed Levin's (1989) statement about the experiencer's position in a sentence when a sentence possessed a verb from the group of *marvel* verbs.

6.8. Appeal verbs

Appeal verbs fell into two subgroups – the ones which had **positive** meaning and the ones which had **negative** meaning. And what was more, there were only five such verbs at all, so the assumption here could be made that there were not much of these verbs used in the novel. Having analyzed the emotion verbs used in the novel, it became clear that the author did not use any of *appeal* verbs which could have the **negative** meaning. In the text, it could not be found the verbs such as *niggle at*, *grate at*, and *jar on*.

Talking about the *appeal* verbs which have the **positive** meaning, from the two of them only one was used in the novel i.e. the verb *appeal to*. This verb was used for 17 times. E.g.:

- 171. Life ought to be lived as he lived it; the privilege of being generous particularly *appealed* to her.
- 172. She appealed to him on every side; he had never known anybody quite like her.

These sentences only confirmed Levin's (1989) statement that in the sentences which contained *appeal* verbs the experiencer moved to the object position of a sentence.

6.9. Desire verbs

Emotion verbs which belong to the class of *desire* verbs fell into two subgroups i.e. into the *want* verbs and into the *long* verbs. The bar chart presented below showed the frequency of the *want* verbs used in the novel. The blue colour showed the number of times a particular word was used in the novel while the red colour showed in how many cases the experiencer acted in a sentence as the subject. As it could be seen, in all the sentences where a particular *want* verb appeared, the experiencer expressed the subject of a sentence.



Figure 15. Frequency of want verbs

The bar chart given above showed that only one verb of this subgroup was not used in the novel i.e. the verb *covet*. All the other verbs of this subgroup were used by the author, though some of them were used only for two or four times while the others were used for more than forty or even for more than several hundred times. The verb *want* was repeated even for 327 times i.e. 2.5 times more frequently than the verb *like* and 5.3 times more than the verb *love*.

Some examples of the used *want* verbs were given below:

- 173. *He decided to do so, anyhow, for truly he desired her greatly.*
- 174. She had loved him as she had **fancied** she could never love any one, and he had always shown that he cared for her—at least in some degree.
- 175. *He wanted* to be like them and to act like them, and so his experience of the more pointless forms of life rapidly broadened.

A different situation could be seen looking at the frequency of the used *long* verbs. There were even 15 *long* verbs which were not used by the author in the novel. These were as following: *crave for, fall for, dangle after, hanker after, hanker for, hunger for, itch for, lust after, lust for, pine for, thirst after, thirst for, wish for, yearn after, and yearn for.* However, there were some *long* verbs which were used by the author in the novel. The frequency of these verbs was given in the bar chart presented below.



Figure 16. Frequency of long verbs

Figure 16 was formed in the way as the previous one i.e. of the bars of two colours where the blue colour expressed the frequency of a particular verb used in the novel and while the red one expressed the frequency of cases where the experiencer acted as the subject of a sentence. Thus, it may be clearly seen that there were no cases of subjectivization in this subgroup.

Moreover, as it could be seen, the frequency of the *long* verbs was rather poor comparing with the other types of emotion verbs. These verbs were used only once or twice in the novel. E.g.:

- 176. Jennie, whose heart **ached for** her father, choked back her emotion.
- 177. The mother neglected everything else to hover over her and pray for the best.

6.10. Judgment verbs

The *judgment* verbs were divided into the **positive** and **negative** ones according to their meaning. The pie chart presented below provided the information about the *judgment* verbs which had **positive** meaning.



Figure 17. Frequency of positive judgment verbs

As it could be seen from Figure 17, there were ten judgment verbs of positive meaning which were used in the novel. The verb *forgive* was one of them which was used most frequently i.e. for 14 times. The second one was the verb *excuse* which was used for ten times. What was more, there were three verbs of this subgroup which were used twice i.e. the verbs such as *pardon*, *repay*, and *reward*. E.g.:

- 178. *He did not attempt to look at her, but in the swirl of feeling that their meeting created he thought that he could forgive, and he did.*
- 179. As a matter of fact, Gerhardt was saving as much as possible in order to **repay** Jennie eventually.
- 180. *He believed that the just would be rewarded in heaven.*

However, there was a number of verbs of this subgroup which were not used in the novel. These were as following: *acclaim*, *applaud*, *celebrate*, *commend*, *compensate*, *compliment*, *congratulate*, *eulogize*, *extol*, *felicitate*, *hail*, *honor*, *laud*, *recompense*, *salute*, *toast*.

Analyzing the *judgment* verbs used in the Dreiser's novel which had **negative** meaning, it could be said that the great majority of verbs of this subgroup was not used. The author did not use even 28 of these verbs such as *abuse*, *backbite*, *castigate*, *censure*, *chasten*, *chide*, *defame*, *denigrate*, *deride*, *lambaste*, *mock*, *revile*, *scold*, *scorn*, *shame*, *snub*, *victimize*, *vilify*, *etc*. However, the word *shame* was used in the novel for 14 times as a noun.

There were four verbs of this subgroup which of them the author used in the novel. Nevertheless, each of these verbs was used only once. These verbs were as follows: *chastise*, *condemn, fine, and insult*. E.g.:

- 181. <...> he had asked of Brother Ambrose, when, in his seventeenth year, that ecclesiastical member was about to **chastise** him for some school-boy misdemeanour.
- 182. She was guilty of a misdeed which he felt able to condemn.
- 183. *Here was this boy arrested and fined for what fate was practically driving him to do.*
- 184. You have insulted me and outraged your daughter's feelings.

From the examples given above we might see that some verbs of this subgroup did allow the subjectivization. This was clearly seen in the sentence 178.

Having analyzed the frequency of mental verbs of all groups used in the novel *Jennie Gerhardt* the chart of the frequency of all the mental verbs used in the novel was made.



Figure 18. Frequency of mental verbs used in the novel "Jennie Gerhardt"

This bar chart given above providesdthe information that Dreiser in his novel which was analyzed used lots of mental verbs. However, it also showed that the number of the verbs according to their subclasses differed a lot cf.: verbs of process of cognition were used for 1455 times, verbs of process of affectivity – for 1183 times, meanwhile verbs from the

subgroup of the process of perception were used almost three times less i.e. 594 times. The total number of the mental process verbs which may be found in the novel was 3232. This number of mental verbs allowed us to make the presumption that the novel *Jennie Gerhardt* is really emotional, allowing a reader to think and to understand the characters' thoughts and feelings and it was worth reading.

CONCLUSIONS

Having this research done, some interesting information about the semantics of mental verbs was discussed.

The aim of this research paper (to analyze the semantics of English mental verbs and to explore the frequency of the usage of such verbs) has been achieved by the following objectives, presented in the introduction. The conclusions can be drawn:

- 1. The analyzed theory of classification of English mental verbs provides the information that there is a number of ways how English mental verbs can be classified. What is more, according to the number of available theory, it can be said that recently, the researchers have shown an increased interest in this topic though there is still much space for the investigation to be made.
- 2. The inventory of English mental verbs which was made was based on the classification of mental verbs according to Helle (2006), Valeika (1998) and Levin (1989). The only difference is that in this paper the emotion verbs and cognitive verbs have been classified according to their semantic features (the classification was also based on the subjective point of view).
- 3. The analyzed theories about the experiencer's position in a sentence revealed the information that the experiencer of a particular action or sensation is not necessary the subject of a sentence. The object is another position where the experiencer could be given and in such cases the phenomenon is raised into the subject part of a sentence: process of sujectivization is observed.
- 4. The analysis of the frequency of mental verbs used in Dreiser's novel *Jennie Gerhardt* revealed that the language used in this novel is very emotional and quite realistic because the number of used emotion verbs is quite huge i.e. the total number of the used mental verbs is 3232. What is more, while using many verbs of the process of cognition (the total number of the used verbs of the process of cognition is 1455), the author managed to express and to show not only the row of random actions of the characters but also the author let the reader to submerge into the characters' thoughts. Nevertheless, this analysis provides the information that to use all the mental verbs in one work of literature is quite impossible as Dreiser also did not managed to use all of them in his novel.

To sum up, this paper revealed that there is a huge number of mental verbs, especially of the process of affectivity. The more mental process verbs are used in the piece of literature, the more emotional it becomes. However, too little attention has been paid to them since there is not so much information about them available. So the semantics of mental verbs in English is one of the fields of linguistic science which is of great importance and which still gives the possibility for the further investigations to be made.

REFERENCES

- 1. Athanasiadaou, A. & E. Tabakowska (eds). 1998. *Cognitive linguistics. Speaking of Emotions: Conceptualisation and Expression.* Berlin. Werner Hildebrand
- Helle, P. 2006. A contrastive Analysis of Perception Verbs in English And German. Norderstedt.
- 3. Iwata, S. 2008. *Loactive Alternation: A Lexical-constructional Approach*. Philadelphia. John Benjamins Publishing Company
- 4. Levin, B. 1989. *English Verb Classes and Alternations. Preliminary Investigation.* Chicago: The University of Chicago Press.
- Levin, B. & M.R. Hovav. 2005. Argument Realization. Cambridge. Cambridge University Press.
- 6. Morley, G. D. 2000. Syntax in functional grammar. An introduction to lexicogrammar in systemic linguistics. London
- Stative verbs.http://grammar.ccc.commnet.edu/grammar/progressive.htm accessed on December 12, 2009
- 8. Syntax. http://en.wikipedia.org/wiki/Syntax; accessed on 9 September, 2010
- 9. Valeika, L. 1998. An Introductory course in Semantic Syntax. Vilnius: Vilnius Pedagogical University.
- 10. Valeika, L. & J. Buitkienė. 2003. An Introductory Course in Theoretical English Grammar. Vilnius: Vilnius Pedagogical University.

SOURCES

- 1. British National Corpus. http://www.natcorp.ox.ac.uk/
- Dickens, Charles. http://www.poetry-online.org/dickens_charles_a_childs_hymn.htm; access time: October 25,2010
- John 14:23,24. http://www.biblestudytools.com/csb/john/14-23.html Accessed on April 25, 2010
- 4. Macmilian English Dictionary for Advanced Learners. 2002. Radstock. United Kingdom.
- 5. Matthew 5:6. http://bible.cc/matthew/5-6.htm Accessed on April 28, 2010
- Proverbs 20:23. http://niv.scripturetext.com/proverbs/20.htm Accessed on April 25, 2010
- Soanes, C. & A. Stevenson (eds.). 2005. Oxford Dictionary of English. Oxford. Oxford University Press.
- Theodore Dreiser Jennie Gerhardt. http://ebooks.adelaide.edu.au/d/dreiser/theodore/jennie/ Accessed on February 25, 2010